

# PRE-CHARGE AND SENSE-OUT CIRCUIT FOR DIFFERENTIAL TYPE ROM

## Abstract

A pre-charge and sense out circuit for differential type ROM. The ROM is capable of connecting to either a first bit line or a second bit line. The pre-charge and sense out circuit contains a pre-charging module electrically connected to the first and the second bit lines, for pre-charging the first and the second bit lines; a selecting module electrically connected to the first bit line, the second bit line, a first data line, and a second data line, for transmitting data according to a first control signal; a charge sharing module electrically connected to the first and the second data lines, for sharing electrical charges to the first and the second data lines; and a sensing module electrically connected to the first and the second data lines, for sensing signals on the first and the second data lines so as to generate an output signal.